

**REMARKS**

**I. Formalities**

Applicant thanks the Examiner for acknowledging the claim for priority under 35 U.S.C. § 119, and receipt of the certified copy of the priority document submitted on September 4, 2001.

Applicant thanks the Examiner for considering the references cited with the Information Disclosure Statement filed on July 17, 2003.

Applicant thanks the Examiner for indicating that the Formal Drawings filed on September 4, 2001 are accepted.

**II. Status of the Application**

By the present amendment, claims 1, 4, 6-11, 14 and 17-19 have been amended. Applicant respectfully submits that these amendments are not intended to narrow the scope of the original claims, but are rather for precision of language. Claims 1-19 are all the claims pending in the Application, with claims 1, 14 and 18 being in independent form. Claims 1-19 have been rejected.

The present amendment addresses each point of objection and rejection raised by the Examiner. Favorable reconsideration is respectfully requested.

**III. Claim Rejections under 35 U.S.C. §102**

The Examiner has rejected claims 1, 4, 6-10, 12, 14 and 17-18 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 5,079,767 to Perlman (hereinafter “Perlman”). Applicant respectfully traverses this rejection for *at least* the independent reasons stated below.

According to the MPEP, “a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” (MPEP § 2131). Applicant respectfully submits that claims 1, 4, 6-10, 12, 14 and 17-18 positively recite limitations which are not disclosed (or suggested) by Perlman.

**A. Independent Claim 1**

Independent claim 1 recites (among other things):

A routing control system for use in a network having a plurality of nodes, said nodes including at least one master node and at least one slave node...

The grounds of rejection allege that the intermediate system nodes 101-104, 106-110 and 114-115, as disclosed in Perlman, correspond to “at least one master node,” as recited in claim 1. The grounds of rejection also allege that the end system nodes 105, 111-113 and 116-118, as disclosed in Perlman, correspond to “at least one slave node,” as further recited in claim 1.

Applicant respectfully disagrees.

Perlman fails to provide any disclosure or suggestion that the intermediate system nodes and the end system nodes disclosed therein correspond to at least one master node and at least one slave node, respectively, as recited in independent claim 1. In contrast to the requirements of claim 1, Perlman discloses only that an end node does not forward messages, rather, an end node only generates messages and receives messages. (Column 8, lines 1-3). Indeed, Perlman discloses that “end nodes” are merely nodes which are situated at the “end” or the terminus of the network system disclosed therein (i.e. “end nodes” are only connected to one other node). (See e.g., column 5, line 60 – column 6, line 6; Figure 1).

However, Perlman provides no disclosure whatsoever that the intermediate system nodes disclosed therein correspond to master nodes, or that the end system nodes disclosed therein correspond to slave nodes, as recited in claim 1. In fact, the grounds of rejection have not pointed to any specific portion of Perlman which discloses or suggests that the intermediate system nodes 101-104, 106-110 and 114-115 control any aspect of the operation of the end system nodes 105, 111-113 and 116-118. As a result, Applicant respectfully submits that claim 1 is allowable for *at least* these reasons.

Independent claim 1 also recites (among other things):

...a spanning tree producing portion provided in said master node which produces a spanning tree of said network based on connection information of said network and which delivers said spanning tree to each slave node whenever said connection information is received...

The grounds of rejection allege that the decision process 360, as disclosed in Perlman, corresponds to “a spanning tree producing portion,” as recited in claim 1. Applicant respectfully disagrees with the grounds of rejection.

Perlman fails to disclose or suggest a spanning tree producing portion, which delivers said spanning tree to each slave node, as recited in claim 1. In stark contrast to the recitations of claim 1, Perlman discloses that the decision process 360, relied upon by the grounds of rejection, is among the routing processes in the network layer performed by intermediate system nodes. (Column 7, lines 60-64). More particularly, Perlman discloses that the decision process 360 is stored in program memory 240 and is carried out by processor 220. (Column 7, lines 66-68; Figure 2). Perlman also discloses that the decision process 360 is responsible for calculating a

spanning tree using Dijkstra's algorithm to determine the routing forwarding data base stored in forwarding data base 330. (Column 8, lines 52-55).

However, Perlman does not disclose or suggest that after an intermediate system node performs the decision process 360, the intermediate system node then delivers a spanning tree to each slave node whenever connection information is received, as recited in claim 1. Indeed, the grounds of rejection have not pointed to any specific portion of Perlman which discloses or suggests that any of the intermediate system nodes disclosed therein ever deliver a spanning tree to each end system node (which the grounds of rejection allege to correspond to "at least one slave node," as recited in claim 1).

In fact, Perlman discloses quite the opposite—that since all of the end system nodes only generate and receive messages, and do not forward messages, the end system nodes do not even perform the routing processes illustrated in Figure 3 (e.g., the decision process 360). (*See* column 7, lines 66 – column 8, lines 3). That is, Perlman discloses that since the end system nodes do not forward messages, they do not even require a spanning tree.

Therefore, Perlman cannot possibly suggest that an intermediate system node delivers a spanning tree to each end system node whenever said connection information is received, as required by claim 1. Indeed, Perlman teaches away from such a suggestion (i.e., the suggestion that an intermediate system node delivers a spanning tree to other network nodes), in that, Perlman expressly discloses that each node in a network is responsible for calculating and updating its own spanning tree. (Column 8, lines 52-55; column 3, lines 23-29, lines 30-35).

Accordingly, Applicant respectfully submits that independent claim 1 is not anticipated by (i.e. is not readable on) the applied Perlman reference for *at least* these independent reasons. Further, Applicant respectfully submits that the dependent claims 4, 6-10 and 12 are allowable *at least* by virtue of their dependency on claim 1. Thus, Applicant respectfully requests that the Examiner withdraw these rejections.

**B. Independent Claim 14**

Independent claim 14 recites (among other things):

...a spanning tree producing portion which produces a spanning tree of said network based on connection information of said network and which delivers said spanning tree to each node of said network whenever said connection information is received...

In view of the similarity between these requirements and the requirements discussed above with respect to independent claim 1, Applicant respectfully submits that the foregoing arguments as to the patentability of independent claim 1 apply *at least* by analogy to claim 14. As such, it is respectfully submitted that claim 14 is patentably distinguishable over the cited Perlman reference *at least* for reasons analogous to those presented above. Further, Applicant submits that the dependent claim 17 is allowable *at least* by virtue of its dependency on claim 14. Thus, the allowance of these claims is respectfully solicited of the Examiner.

**C. Independent Claim 18**

Independent claim 18 recites (among other things):

A method of controlling a routing table used in a network having a plurality of nodes, said

nodes including at least one master node and at least one slave node...

Independent claim 18 also recites:

...producing, at said master node, a spanning tree of said network based on connection information of said network and which delivers said spanning tree to each slave node whenever said connection information is received...

In view of the similarity between these requirements and the requirements discussed above with respect to independent claim 1, Applicant respectfully submits that the foregoing arguments as to the patentability of independent claim 1 apply *at least* by analogy to claim 18. As such, it is respectfully submitted that claim 18 is patentably distinguishable over the cited Perlman reference *at least* for reasons analogous to those presented above. Thus, the allowance of this claim is respectfully solicited of the Examiner.

#### **IV. Claim Rejections under 35 U.S.C. §103 – Perlman in view of Meier**

The Examiner has rejected claims 2 and 15 under 35 U.S.C. § 103(a) as being unpatentable over Perlman in view of U.S. Patent No. 6,826,165 to Meier *et al.* (hereinafter “Meier”). Applicant respectfully traverses these rejections for *at least* the independent reasons stated below.

In order for the Examiner to maintain a rejection under 35 U.S.C. §103, Perlman, Meier, or some combination thereof, must teach or suggest all of the limitations of claims 2 and 15. Applicant respectfully submits that neither Perlman, Meier, nor any combination thereof, teaches or suggests all of the limitations of claims 2 and 15.

Claims 2 and 15 incorporate all the novel and non-obvious recitations of their base claims 1 and 14, respectively. As already discussed above, Perlman fails to teach or suggest all of the recitations of independent claims 1 and 14. Moreover, Meier fails to cure the deficient teachings of Perlman. Therefore, Applicant respectfully submits that the dependent claims 2 and 15 are allowable *at least* by virtue of their dependency on independent claims 1 and 14, respectively. Accordingly, Applicant respectfully requests that the Examiner withdraw these rejections.

**V. Claim Rejections under 35 U.S.C. §103 – Perlman in view of Lee**

The Examiner has rejected claims 3 and 16 under 35 U.S.C. § 103(a) as being unpatentable over Perlman in view of U.S. Patent No. 6,122,283 to Lee *et al.* (hereinafter “Lee”). Applicant respectfully traverses these rejections for *at least* the independent reasons stated below.

Claims 3 and 16 incorporate all the novel and non-obvious recitations of their base claims 1 and 14, respectively. As already discussed above, Perlman fails to teach or suggest all of the recitations of independent claims 1 and 14. Further, Lee fails to cure the deficient teachings of Perlman. Therefore, Applicant respectfully submits that the dependent claims 3 and 16 are allowable *at least* by virtue of their dependency on independent claims 1 and 14, respectively. As such, Applicant respectfully requests that the Examiner withdraw these rejections.

**VI. Claim Rejections under 35 U.S.C. §103 – Perlman in view of Tsukakoshi and further in view of Ma**

The Examiner has rejected claim 5 under 35 U.S.C. § 103(a) as being unpatentable over Perlman, in view of U.S. Patent No. 6,496,510 to Tsukakoshi *et al.* (hereinafter “Tsukakoshi”), and further in view of U.S. Patent Publication 2005/0083936 to Ma (hereinafter “Ma”).

Applicant respectfully traverses these rejections for *at least* the independent reasons stated below.

Claim 5 incorporates all the novel and non-obvious recitations of its base claim 1. As already discussed above, Perlman fails to teach or suggest all of the recitations of independent claim 1. Additionally, neither Tsukakoshi nor Ma cures the deficient teachings of Perlman. Accordingly, Applicant respectfully submits that the dependent claim 5 is allowable *at least* by virtue of its dependency on independent claim 1. Thus, Applicant respectfully requests that the Examiner withdraw this rejection.

**VII. Claim Rejections under 35 U.S.C. §103 – Perlman in view of Sepulveda-Garese**

The Examiner has rejected claim 11 under 35 U.S.C. § 103(a) as being unpatentable over Perlman, in view of U.S. Patent No. 5,430,730 to Sepulveda-Garese *et al.* (hereinafter “Sepulveda-Garese”). Applicant respectfully traverses this rejection for *at least* the independent reasons stated below.

Claim 11 incorporates all the novel and non-obvious recitations of its base claim 1. As already discussed above, Perlman fails to teach or suggest all of the recitations of independent claim 1. Further, Sepulveda-Garese fails to cure the deficient teachings of Perlman. Accordingly, Applicant respectfully submits that the dependent claim 11 is allowable *at least* by virtue of its dependency on independent claim 1. Thus, Applicant respectfully requests that the Examiner withdraw this rejection.

**VIII. Claim Rejections under 35 U.S.C. §103 – Perlman in view of Green**

The Examiner has rejected claims 13 and 19 under 35 U.S.C. § 103(a) as being unpatentable over Perlman in view of U.S. Patent No. 5,517,494 to Green *et al.* (hereinafter “Green”). Applicant respectfully traverses these rejections for *at least* the independent reasons stated below.

Claims 13 and 19 incorporate all the novel and non-obvious recitations of their base claims 1 and 18, respectively. As already discussed above, Perlman fails to teach or suggest all of the recitations of independent claims 1 and 14. Moreover, Green fails to cure the deficient teachings of Perlman. Therefore, Applicant respectfully submits that the dependent claims 13 and 19 are allowable *at least* by virtue of their dependency on independent claims 1 and 18, respectively. Hence, Applicant respectfully requests that the Examiner withdraw these rejections.

**IX. Conclusion**

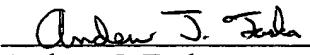
In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

**Amendment Under 37 C.F.R. § 1.111  
U.S. Serial No. 09/944,203**

**Attorney Docket No.: Q66101**

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

  
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